

CLAIMS:

1. A method of controlling a set of transcoding channels (TC[1] to TC[n]), a transcoding channel (TC[i]) allowing an input compressed data signal (ICS[i]) encoded at an input bit rate (Rin[i]) to be converted into an output compressed data signal (OCS[i]) encoded at an output bit rate (Rout[i]), said method of controlling comprising :

5 a step of computing an indicator of a compressed data quality for the respective transcoding channels, said indicator being computed from the input compressed data signal (ICS[i]),

10 a step of allocating the output bit rate (Rout[i]) to the transcoding channel (TC[i]) from a total output bit rate (Rtot), its corresponding indicator and a sum of the indicators of the transcoding channels.

2. A method of controlling a set of transcoding channels as claimed in claim 1, wherein the indicator is computed from an average, over a set of encoded pictures, of a function of an average quantization scale over a picture and a number of bits used to encode the same picture.

3. A method of controlling a set of transcoding channels as claimed in claim 2, wherein the indicator is computed from a weighted average of a set of the averages calculated over the set of encoded pictures.

4. A controller (CONT) for controlling a set of transcoders (TC[1] to TC[n]), a transcoder (TC[i]) allowing an input compressed data signal (ICS[i]) encoded at an input bit rate (Rin[i]) to be converted into an output compressed data signal (OCS[i]) encoded at an output bit rate (Rout[i]), said controller comprising :

25 means for computing an indicator of a compressed data quality for the respective transcoders, said indicator being computed from the input compressed data signal (ICS[i]),

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means for allocating the output bit rate ($R_{out}[i]$) to the transcoder ($TC[i]$) from a total output bit rate (R_{tot}), its corresponding indicator and a sum of the indicators of the transcoders.

5 5. A data multiplexing system comprising :

a set of transcoders ($TC[1]$ to $TC[n]$) for converting input compressed data signals ($ICS[1]$ to $ICS[n]$) encoded at an input bit rate ($R_{in}[1]$ to $R_{in}[n]$) into output compressed data signals ($OCS[1]$ to $OCS[n]$) encoded at an output bit rate ($R_{out}[1]$ to $R_{out}[n]$),

10 a controller (CONT) for controlling the set of transcoders and comprising :
means for computing an indicator of a compressed data quality for the respective transcoders,
said indicator being computed from the input compressed data signal ($ICS[i]$),
means for allocating the output bit rate ($R_{out}[i]$) to the transcoder ($TC[i]$) from a total
output bit rate (R_{tot}), its corresponding indicator and a sum of the indicators of the
15 transcoders,

a multiplexer (MUX) for providing a multiplexed data signal (MS) at the
total output bit rate (R_{tot}) by multiplexing of the output compressed data signals ($OCS[1]$
to $OCS[n]$).

20 6. A computer program product for a controller (CONT) that comprises a set of
instructions, which, when loaded into the controller, causes the controller to carry out the
method of controlling as claimed in claims 1 to 3.

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